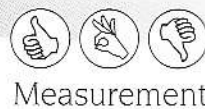


64 Measurement - Test

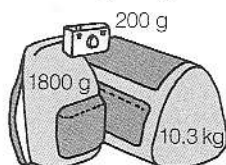


Measurement

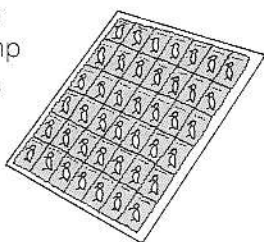
A Holiday in Oz

Sophie and Peter went on holiday to Australia. They rented a car and toured the outback.

- 1 How many kilograms of luggage did Sophie take?



- 2 In the outback they drove 240 km in 4 hours.
- a) What was their average speed in km/h?
- b) At this speed how long would it take to drive 420 km?
- 3 Camper van A is 4.3 m long; camper van B is 4.18 m long. Which is longer? By how many centimetres?
- 4 A water tank holds 5 L of water. Sophie used it to fill 2 identical bottles to the rim. There was 400 mL of water left in the tank. Calculate the capacity of each bottle.
- 5 They bought a sheet of stamps for postcards home. Each stamp was worth 90¢. How much was the sheet of stamps worth?



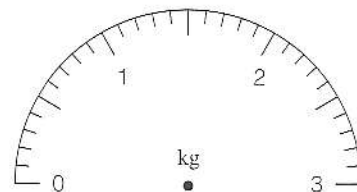
- 6 The time in Darwin is $2\frac{1}{2}$ hours behind New Zealand time. It was 11.40 am in Darwin when Peter phoned home. What time was it in New Zealand?

B From Steak to Bricks

- 1 Steak costs \$26 per kg. Claire buys 250 g of steak.

- a) What fraction of a kilogram is 250 g?

- b) On the scale draw a pointer at 250 g.

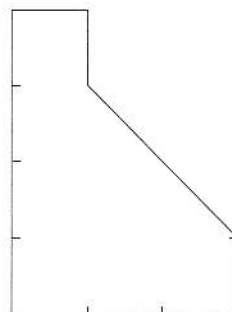


- c) Calculate the cost of 250 g of steak.

- 2 Colour the largest amount red.

- a) 605 mL 0.65 L
- b) 450 cm 3.2 m 4000 mm
- c) 0.08 kg 100 g 20 000 mg

3

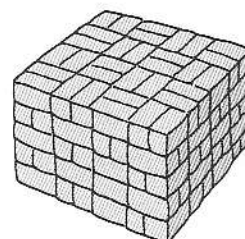


- a) Measure the perimeter of this shape.

- b) Find the area of the shape.

- 4a) How many bricks are on the top layer of this stack?

- b) How many bricks are in the stack?



- c) One brick weighs 850 g. Calculate the total weight of the stack. Give your answer in kilograms.



Geometry is a branch of mathematics to do with lines, curves and shapes.

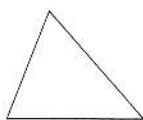
A Shapes in 2D

Two dimensional shapes have length and width but no depth, they are flat shapes.

A polygon is a closed figure consisting of 3 or more straight sides.

1 Unscramble the names of these polygons.

a)



geltrain

.....

b)



tralaladrique

.....

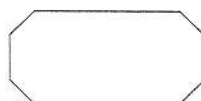
c)



tongepan

.....

d)



congato

.....

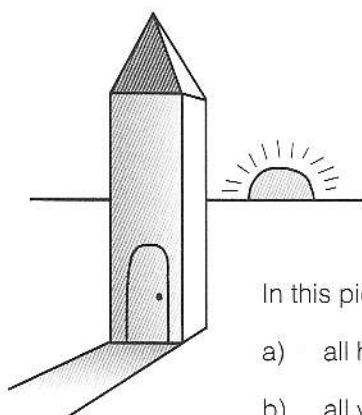
C Lines

1 In the space on the right, draw accurately . . .

a) two lines which are parallel.

b) two lines which are perpendicular.

2



In this picture, colour . . .

a) all horizontal lines red.

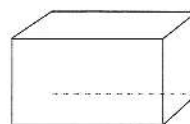
b) all vertical lines blue.

B Shapes in 3D

Three dimensional shapes have depth (or height). When drawing 3D shapes we often use shading to simulate depth. Invisible edges are drawn as dotted lines. Some well known 3D shapes are cube, cuboid, prism, pyramid, cylinder, sphere and cone.

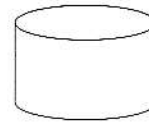
1 Draw with dotted lines the invisible edges in these shapes (one edge is done for you). Name each shape.

a)



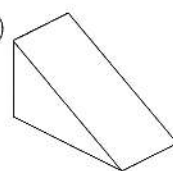
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b)



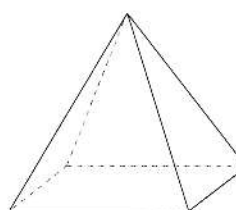
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c)



.....

2



In this pyramid, colour . . .

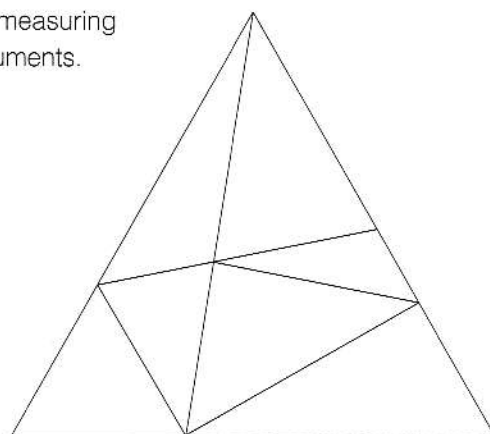
a) one face red,

b) one edge blue,

c) one vertex green.

D Triangles

1 Use measuring instruments.



a) Find 2 right-angled triangles. Colour them blue.

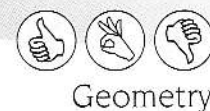
b) Find 1 equilateral triangle. Colour it green.

c) Find 2 isosceles triangles. Colour them red.

d) What is the name of the white triangles?

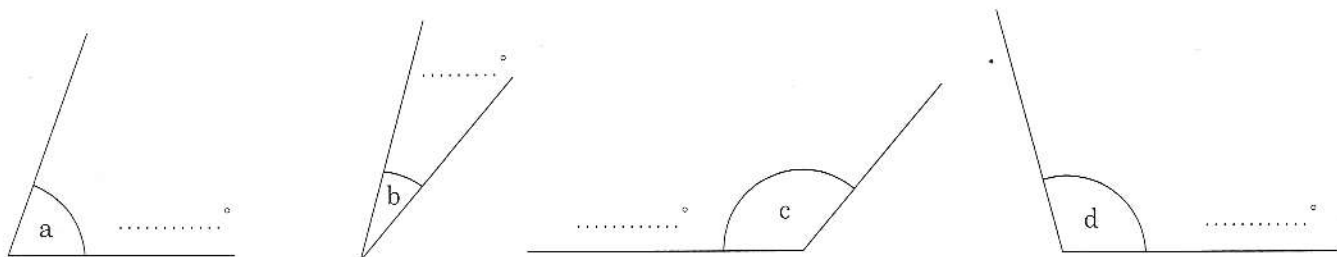
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66 Angles

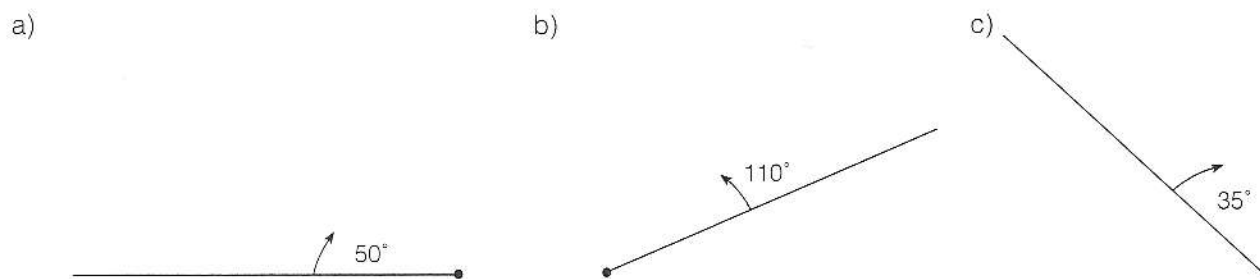


A Using a Protractor

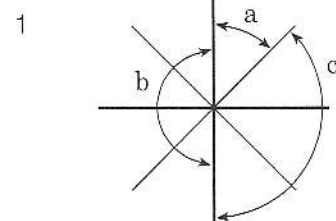
1 Use your protractor to measure these angles.



2 Draw the second arm of these angles.



B Without a Protractor

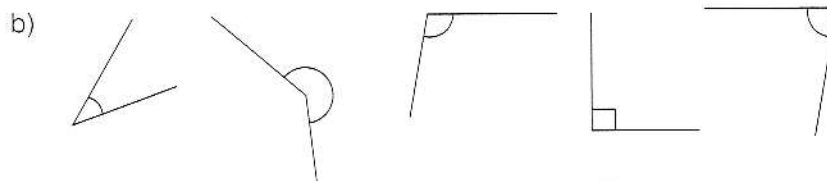


- a) How many degrees in ...
a quarter turn? a half turn? a full turn?
- b) How many degrees in ...
angle a? angle b? angle c?

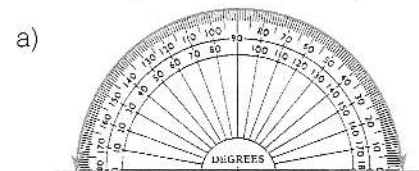
2 *Acute angles* are less than 90° . *Obtuse angles* are over 90° but under 180° .
Colour the acute angles red and the obtuse angles blue.

a)

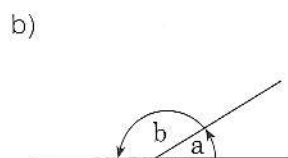
120°	58°	90°	100°
200°	103°	15°	180°



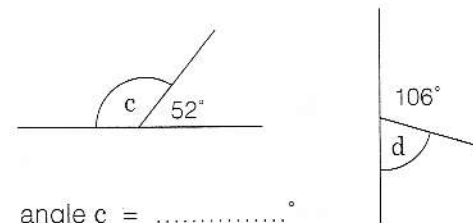
3 Complete these with angle sizes in degrees.



The angle on a straight line
is $^\circ$



Angles a and b add up
to $^\circ$



- c) angle c = $^\circ$
d) angle d = $^\circ$